

REMARKS

After the foregoing Amendment, claims 1 – 2 and 7 – 10 are currently pending in this application, as amended. Claim 1 has been amended. No new matter has been introduced into the claims by these amendments.

Claim Rejections - 35 USC §103(a)

Claims 1, 2 and 7 – 10 were rejected in the Action under 35 U.S.C. § 103(a) as obvious over U.S. Patent No. 2,641,278 to Eplett et al. in view of GB 661,479.

Applicant respectfully traverses the rejections. The invention as currently claimed in claim 1 is a backflow preventer that includes an insert housing with a housing interior in which a valve member is located. The valve member contacts a valve seat in a closed position thereof and can be moved against a restoring force from the closed position into an open position. The housing interior has, in a movement zone of the valve member, an interior section, which has a greater open cross section relative to an outer periphery of the valve member. To allow play-free guidance of the valve member, a spring-elastic valve member guide is included. The guide has at least two spring arms, formed on an inner portion of the insert housing, between which the valve body slides. The spring arms are **substantially parallel to a movement direction of the valve member and are arranged with free spring arm ends thereof in a region of the valve seat.** The spring arms contact

the housing inner wall and/or the valve member. The spring-elastic valve member guide is effective between the valve member and a housing inner wall surrounding the interior section.

Eplett discloses a pressure relief valve having a threaded portion for connection to a threaded pipe or vessel containing pressure fluid. Eplett fails to show a spring elastic valve member guide having at least two spring arms, formed on an inner portion of the insert housing, between which the valve body slides and is arranged with free spring arm ends thereof in a region of the valve seat. In contrast, the “spider arms” 21 disclosed in Eplett are fixed to the valve body and are not formed on an inner portion of the housing body or are substantially parallel to the movement of the valve member, as is currently claimed. Further, the valve head 13 of Eplett does not slide between the “spider arms” 21 as is claimed. Column 5, lines 18 – 24 of Eplett state: “A ring 22 rests upon the upper surface of the central part 19 of the spider and constitutes the lower abutment for the spring 10. The spring 10 presses the ring 22 downwardly against the spider and clamps the spider against the upper surface 18 of the valve head *so that the spider moves with the head.*” (emphasis added)

The Action specifically states that Eplett fails to disclose spring arms formed on an inside surface of the insert housing. The Action also states that GB ‘479 discloses a valve arrangement wherein a spring disc having spring arms (37) is

formed on an inside surface of the insert housing (20) for the purpose of guiding the valve in its movement.

Applicant respectfully disagrees since this is clearly not the case. GB 661 479 shows a hydraulic shock absorber having a two-way valve in the shock housing. The two-way valve of the shock absorber has a valve body with an inner ring flange 26 that serves as a valve seat for the closing body 24. The closing body has a through flow canal in which an opposite flow direction operable poppet valve is arranged. When the shock absorber is extended, a vacuum is created in the interior of the housing which lifts the closing body from its valve seat, until its stroke movement, is limited by radially extending finger-like elastic elements. Lines 65 – 85 of GB 661 479 states: “A spring disc comprising a ring-shaped frame portion 35 fits into the recess 22 of the valve cage and is secured therein by swaging the edge 36 of the valve cage inwardly and over the portion 35. Extending inwardly and radially from said frame portion 35 are a plurality of resilient fingers 37, the inner ends terminating short of the tubular extension 31 of the valve 30, and pressing against the valve 30. The portion 36 of the valve cage 20 is swaged over and upon the ring portion 35 of the spring until the desired pressure by fingers 37 upon the valve 30 is attained. Thus the valve 30 is yieldably urged upon its valve seat 23 in the valve cage by the resilient fingers 37, which, having their inner ends in close

proximity to the tubular extension 31 of the valve form a guide to maintain the valve substantially concentric with the annular seat 23.”

As stated above, the fingers 37 keep the valve 30 seated. The valve 30 does not slide between the fingers 37 as is claimed. Further, GB 661,479 fails to remedy the deficiencies of Eplett since the proposed combination fails to show a spring elastic valve member guide having at least two spring arms that are substantially parallel to a movement direction of the valve member and formed on an inner portion of the insert housing arranged with free spring arm ends thereof in a region of the valve seat. Specifically, GB 661,479 cannot remedy the deficiencies of Eplett since the springs 37 of GB 661,479 are closing springs that bias the valve against a closing seat and are not guides, between which the valve body slides, as is currently claimed.

Claims 2, and 7 – 10 are dependent upon claim 1, which the Applicant believes is allowable over the cited prior art of record for the at least the same reasons provided above. Based on the arguments presented above, withdrawal of the § 103(a) rejection of claims 1, 2 and 7 – 10 is respectfully requested.

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Application No.: 10/572,915

Conclusion

If the Examiner believes that any additional minor formal matters need to be addressed in order to place this application in condition for allowance, or that a telephone interview will help to materially advance the prosecution of this application, the Examiner is invited to contact the undersigned by telephone at the Examiner's convenience.

In view of the foregoing amendment and remarks, Applicants respectfully submit that the present application, including claims 1, 2, and 7 – 10 is in condition for allowance and a notice to that effect is respectfully requested.

Respectfully submitted,

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